CLAIMS

What is claimed is:

1.   A method for authenticating transferred data between a sender and a receiver over an open network comprising the steps of:

establishing a first secure transmission of data between the sender and the receiver;

establishing at least one additional transmission of data between the sender and the receiver;

adaptively determining the number of additional transmissions;

transmitting the data during at least one of the additional transmissions; and

authenticating each transmission in which data is transmitted.

2.   The method according to claim 1, wherein the number of additional transmissions is adaptively selected, at least in part, based upon the performance overhead of the system.

3.   The method according to claim 2, wherein the number of additional transmissions is adaptively selected, at least in part, based upon monitored conditions.

4.   The method according to claim 2, wherein the number of additional transmissions is adaptively selected, at least in part, based upon a set of criteria that are used in an algorithm to determine the number of additional transmissions, the criteria selected from the group consisting of the frequency of transmissions between the sender and receiver, the closeness of the sender to the source of the transactions, and the usage patterns of the client.

5.   The method according to claim 4, wherein the algorithm is a statistical averaging algorithm.

6.   The method according to claim 1, further comprising the step of transmitting at least one token to the receiver during the first secure transmission; wherein the data transmitting step further comprises transmitting at least one token along with the data; and wherein the authentication step comprises comparing the at least one token transmitted during the additional transmission to the at least one token transmitted during the first secure transmission to determine whether the transmission is authentic.

7.   The method according to claim 6, wherein the at least one token comprises a preselected number of tokens.

8. The method according to claim 7, wherein the number of at least one transmissions corresponds to the preselected number of tokens.

9. The method according to claim 7, wherein the number of at least one transmissions is greater than the preselected number of tokens.

10. The method according to claim 7, wherein the number of at least one transmissions is less than the preselected number of tokens.

11. The method according to claim 6, wherein the at least one additional transmission is conducted over an unsecure or open connection.

12. The method according to claim 6, wherein the first secure transmission is encrypted.

13. The method according to claim 6, wherein the at least one additional transmission is sent in plaintext.

14. The method according to claim 6, further comprising the steps of transmitting a checksum value during the first transmission and having the

receiver verify that the checksum value is accurate by comparing the transmitted

value to a checksum value generated using a similar checksum algorithm.

15.   The method according to claim 14, wherein the transmitted

checksum value is based upon checksum values transmitted during previous

5   transmissions.